

OLDEST BEE PAPER
IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED
IN 1861

DEVOTED TO SCIENTIFIC BEE-CULTURE AND THE PRODUCTION AND SALE OF PURE HONEY.

VOL. XVII.

CHICAGO, ILL., MARCH 2, 1881.

No. 9.

THE AMERICAN BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,
EDITOR AND PROPRIETOR,
974 WEST MADISON ST., CHICAGO, ILL.

TERMS OF SUBSCRIPTION:

WEEKLY—(52 numbers) \$2.00 a year, in advance.
Three or Six Months at the same rate.

SEMI-MONTHLY—The first and third numbers of each month, at \$1.00 a year, in advance.

MONTHLY—The first number of each month, at 50 cents a year, in advance.

Any person sending a Club of six is entitled to an extra copy (like the club) which may be sent to any address desired. Sample copies furnished free.

Remit by money-order, registered letter, express or bank draft on Chicago or New York, payable to our order. Such only are at our risk. Checks on local banks cost us 25 cents for collecting.

Free of postage in the United States or Canada.
Postage to Europe 50 cents extra.

Entered at Chicago post office as second class matter.

CORRESPONDENCE

For the American Bee Journal

Restoring Bees when apparently Dead

REV. L. JOHNSON.

Every person knows that hornets, wasps, yellow jackets, and all the varieties of wild bees will be encased in frost and ice for months, and as soon as warmed and dried will be as active as ever. But the honey bee is not so constituted. Her blood is warm, and her system must be supplied with food to sustain life; yet during winter she lies in a semi-torpid condition, and may even seem entirely dead, and yet be restored. When a boy, I frequently found bees drowned in sugar-water during sugar making, and after they had lain for hours, could be brought to life by lying them in the sun and blowing the breath upon them. In some instances I have restored them after they had been in water all night. Langstroth states, page 25, that Dzierzon and Berlespech both subjected queens to as much as 36 hours of cold in an ice-house and then restored some of them to life.

The thought occurred to me recently that we might make use of these facts where bees had become starved and chilled in the hive. An opportunity soon occurred. A few days ago, in looking over my hives, I found one which had consumed all their stores, and were all about dead, except between two combs, and these could scarcely move. I immediately gave them some warm syrup, and placed honey on the top of the frames, covering them up. In about half an hour I examined them and found the whole colony active and lively, and they are now as vigorous as any colony I have.

In two other instances, bee-keepers with whom I have talked, have met with the same experience. One stated that he found one colony apparently dead, and frost among the bees, but on placing them in a warm room and fur-

nishing them food, they soon became lively. In almost every instance I think bees can be resuscitated within 10 or 12 hours after they seem to be dead, unless they become frozen. In examining a hive, if any living bees can be found, if immediately supplied with food and gently warmed, they most likely can be saved.

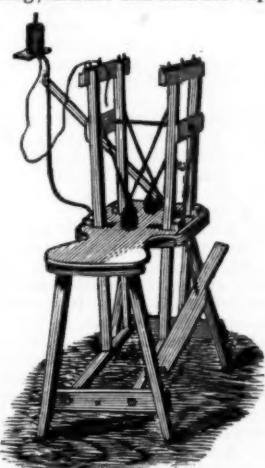
The last bees to die in a colony are generally those near the queen. Their last feeble morsel is divided with their mother, and oftentimes her position shows she had survived her children some time. Before giving your seemingly dead bees up in despair, make one earnest effort to restore them, and you may be rewarded by saving a valuable queen and colony.

Walton, Ky., Feb. 10, 1881.

Given's Frame-Wiring Machine.

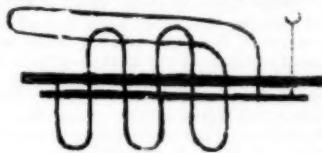
On this page we give some engravings, showing the machine used by Mr. D. S. Given for putting wires in the brood-frames before filling them with comb foundation. He gives the following description of them and how they are to be used:

The two arms seen separated by the springs are regulated by set screws so they will open to a required distance. They are pulled together the foot lever. The upper and lower bars of the frames are punched by pairs, and each arm is made to hold its piece to the exact place by a spring, and are one-half inch apart.



The wire is sewed through both pieces at once by using a harness needle. The wire is run in a Langstroth frame as follows: draw the needle through the first set of holes and return it through the second set, placing the other thumb in the loop, and with the thumb draw out one arm length of wire, letting one-half of it follow the needle and the rest is dropped over a light spring at the foot of the arm, return the needle through the third set of holes, placing the thumb in the loop, now we pull with the thumb and the light spring on the other side will raise, letting loose of the wire to avoid kinks. Now we sew back and forward through all the holes, leaving a slack each time, and fasten the end by

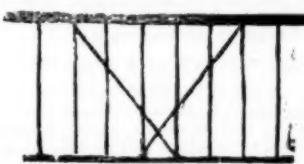
a small tack. The position the wire is now in, is seen in the following cut:



We now place the thumbs in the first two short loops, let up the foot lever, draw in the slack wire on the light spring by the first thumb, and then draw it out on second thumb, and we have all the slack in the centre of the frame, as seen in cut below. Rub over



the wires with the finger, and by the aid of the springs this slack is taken in and enough off the spool to let the frame to its set distance. If the angle wires are wanted, enough wire is broken off the spool to run them in, and the end is fastened on the same tack with the other. Then we have the upper and lower bars with the wires, as seen in cut below:



These are piled over the edge of a board, and are ready for use on the press.

The advantages in this machine is speed in wiring, saving over one-half the time. It can be worked by boys as it avoids kinks in the wire, and no danger of having the frame bowed by the wires. Then it is much better suited for lifting off the dies than the solid frame.

For the American Bee Journal.

Upward Ventilation for Bees.

G. M. DOOLITTLE.

On page 42 of the BEE JOURNAL, Mr. F. H. Miner, under the above heading, wholly ignores upward ventilation, and seems to think that "dangerous thing, a little learning," has put stupid theories into the brains of most bee-keepers—for the large majority of our apiarists of the present day favor upward ventilation. Let us look at the facts and see on whose shoulders the great loss of the past falls; if on the "learned array of acknowledged authorities," let them fall, and if on "these old basswood-gum men," let THEM fall.

Among the pleasant recollections of the past the bees are ever foremost, and at 10 years of age I was an anxious watcher of the bees, of which father had some 20 colonies or more. These were kept in the Weeks patent hive, where the bottom board was attached to

the hive with wire hooks and staples, and with a button so arranged that for winter the bottom was allowed to hang suspended an inch below the hive, while in summer the button was so turned as to bring the bottom board tight to the bottom of the hive, except the entrance. With this hive, father had poor success in wintering bees, while a neighbor wintered his safely with the hive tight at the bottom, and a two-inch auger-hole at the top. Soon after the bottom boards were left fastened to the hives, and a large hole made near the top for the bees to go in and out at, and for ventilation, after which no losses occurred from wintering, of any amount. So much for wintering years ago.

Several years after, father lost all of his bees by that dreaded disease, foul brood, and no more were kept in the family till I purchased again in 1869. At that time there were plenty of bees kept near us in box hives, many of which were set on blocks, as Mr. Miner would have them for successful wintering. We adopted the upward ventilation theory, but not a direct current of air through the hive. Now for the facts again. While myself and four others have about 200 colonies each wintered with upward ventilation every year, not one of the box hive (or lower ventilation) men has a single colony.

Now, I wish to call Mr. Miner's attention to a colony in its natural home in the hollow tree in the woods. Here we find them quite as likely to go into a tree with the hole above the hollow as at the bottom, and those with the hole at the top seem to prosper the best. We also find that the hollow is composed of partially-decayed wood, especially above the combs. Thus, in the winter the moisture from the bees passes into the decayed wood, which surrounds them, and is expelled out each summer by the heat. Thus we have something pointing toward a porous covering for our bees for wintering, from which originated chaff hives, chaff cushions, etc. I also wish to say, his predictions of "great losses this winter from smothering," are all groundless. Bees cannot be smothered in such hives, seal the bottom as tight as you please. With upward ventilation and all air cut off at the bottom, there is no circulation only as the bees themselves cause it, and they make the circulation as they require it, and no more.

As regards giving water to bees, I think it wholly unnecessary, for the reason that I believe it a bad plan for bees to breed much, if any, before the middle of March, to the middle of April, according to the season. Colonies that commence breeding earlier are not as good, as a rule, on the first of June, as those of the same strength as to numbers of bees that do not commence to rear brood before the first of April. I am becoming more firmly convinced, that the practice of keeping bees in the cellar till pollen is plenty in the fields, is the correct one; and if bees are wintered out of doors, let them be packed with chaff to so great a depth that the sun's rays will not arouse the bees to activity every time it shines on them for a little while in the middle of the day, when the air is cool otherwise. This early breeding causes a much greater consumption of honey, and a greater loss of bees, without a corresponding benefit. When it comes steady warm

weather, two bees are reared for one old one lost; while in early spring, two old bees are lost to where one young bee is reared.

Now, if Mr. Miner will take five colonies and pack them with chaff according to the best approved methods, stopping all lower ventilation entirely, and take five others, and winter them according to his theory advanced on page 42, I will guarantee that in two years from now he will admit that upward ventilation, through chaff, is the only correct way to winter bees, where wintered on summer stands.

Borodino, N. Y., Feb. 16, 1881.

For the American Bee Journal.

Honey-Producing Plants.

D. LANTZ.

MR. EDITOR:—Please to let us know, through your excellent JOURNAL, where the seed of the "Rocky Mountain Bee-Plant," and the "Sweet Clover Seed" can be had, and also which of these two seeds will produce the best feed for bees;

This is a great neighborhood for raising pork, and our farmers are making money in the swine culture. But their mode of raising pork differs very much from that of most honey raisers. They do not procure the best breed of swine, and then turn them out to take care of themselves, and find their feed as best they can; and if they succeed in gathering a little surplus, then rob them of it, and appropriate it to some other purpose. But experience has taught the pork raiser that "it pays" to plant and cultivate forty or fifty acres of corn, at a considerable expense every year, to feed swine. It would, however be considered a wonderful thing if some of our honey producers should be told that "it would pay" if they would cultivate only five or six acres of land every year, for the benefit of their bees. This would be regarded as too great an expense.

And then, the farmer that raises pork has not only to give the use of a large amount of land, and cultivate the corn, but he must also gather it, and then besides procuring winter quarters for the swine, must feed them twice or three times every day during the entire winter. This the bee man has not to do, because the bees gather their food, and also feed themselves. And yet we are told sometimes, that bees "won't pay." Neither would farming, or stock-raising, or merchandising, or banking, or any other business pay, if it was managed as many manage their bees.

Forreston, Ill., Jan. 25, 1881.

[The sweet clover is the best, by far. For where to get them, see our advertising pages.—ED.]

For the American Bee Journal.

Bee-keeping in Canada.

WM. F. CLARKE.

It is estimated by those best qualified to judge, that there are about 10,000 bee-keepers in Canada. Only a small proportion of these are abreast of the times. The great majority are still in the dark ages of bee-keeping. It is proverbial that nothing is so successful as success. Mr. Jones' exploits have been recorded in our newspapers, and the result is quite a *furore* in the minds of many, who think they see in the road he has traveled so well, a sure highway to wealth. I receive many letters of enquiry from parties anxious to go into this line of business. It is quite impossible for me to answer them privately, but if the editor of the AMERICAN BEE JOURNAL can find a corner for

A CANADIAN QUESTION DRAWER,

I will try to fill it, and henceforth acknowledge such letters by sending a postal card to the writers with the legend on it, "Subscribe to the AMERICAN BEE JOURNAL." If present and future subscribers to the JOURNAL will write me direct, their communications will receive the promptest attention competitive with other duties. My address is Listowel, Ontario. By way of making

a beginning, I will reply to a few letters in this article.

If those I select refer almost wholly to the A B C of bee-keeping, it must not be inferred that all are of this character, but only that these most urgently call for immediate attention.

OLD STYLE BEE-KEEPING.

"We have 45 hives of bees, and have been keeping them in the old fashioned way, that is, in the old box hive, and then after the swarming season is over, put on a smaller box called a 'cap,' on the top of the hive. When a colony does not do well, we smother it and take the honey. Now what I want to know is this—what kind of hive would you suggest?"

Keeping bees in the old box hive is entirely out of date, and the sooner it is abandoned the better. The difficulty with it is that you cannot regulate the internal economy of a colony, but must leave the bees to do pretty much as they please. Bees need management, the same as cattle, poultry, sheep, hogs, or any other kind of farm stock. What profit would there be from any of the live stock of the farm if they were left to themselves? Very little. Precisely so with bees. You must have access to them and control over them, or bee-keeping will prove a very unsatisfactory business. The main things about a hive are to have it of convenient size, and made on

THE MOBILE FRAME PRINCIPLE.

These two points observed, the simpler a hive is the better. I have tried hives of all sorts and sizes; the result is, that I have found the most complicated and costly ones the most worthless. A hive costing about a dollar, unpainted, and without section frames, or a dollar and a half, painted or sectioned, is good enough for me, or for any common sense bee-keeper who has an eye to profit in bee-keeping. Such may be ordered as a pattern, and others made from it, or a quantity can be bought in the flat at a reduced rate, and nailed together by any man who has sense enough to use a hammer.

To adopt a hive of this kind, the bees must be transferred from the old box hives. How to do this is told in the bee books, and no man who keeps 45 colonies of bees, or a single colony, for that matter, can afford to do without a good manual of apiculture. The cost of such a book is trifling when compared with its value and utility.

BEE-KEEPING AS A SPECIALTY.

"Farming is too hard work for me. I must engage in some business that will keep me out of doors, as my health is not good; therefore I think bee-keeping will be just the employment for me. How long would it take a person of ordinary intelligence to become capable of managing 200 colonies? Of course I intend to study thoroughly books for that matter, can afford to do without a good manual of apiculture. The cost of such a book is trifling when compared with its value and utility.

In reply to this, let me say very distinctly, that bee-keeping is a business which, like any other, demands an apprenticeship in order to run it properly. At the outset, the question should be raised,—have I taste, aptitude and general qualification for it? "Every man can't be a poet," nor can every man be a successful bee-keeper. This question settled, the next thing is to master the principles of apiculture. This can be done by the study of books. Then comes experience, which can only be got by handling bees. As a general rule, it is best to begin bee-keeping with one or two colonies. This does not involve much outlay, and if there should be failure at first, as it is very likely there will, the loss is not serious. I cannot say how long it would take a person of ordinary intelligence to become capable of managing a 200 colony apiary. I think if he spent two seasons with a first-class practical bee-keeper he might venture. I also feel safe in saying that if he begins with one or two colonies, by the time they multiply to 200, he will be master of the situation.

If a man has capital to invest, and can hire a thoroughly competent bee-keep-

er, it might be safe to start on a large scale, but it is with bee-keeping as with farming in general.

"He that by the plow would thrive,
Himself must either hold or drive."

THE BEE SMOKER.

"Of what use is the smoker, spoken of in articles about bees?" This enquirer evidently neither owns a manual of apiculture nor takes a bee-journal. He will be wise to do both immediately, or sooner. A smoker is used to tame bees, in order that they may be handled easily. It is a pair of small bellows, with fire-box and funnel attached, so made that it can be worked with one hand. Smoke, properly applied, has the effect of quieting the irascible little insects.

FREEZING BEES.

"I wish to know whether bees should be let freeze in winter?"

No. They should not even be allowed to get chilled. They should be kept in a temperature a little above the freezing point. Then their natural warmth will keep them sufficiently comfortable, and they will relapse into a state of semitorpor, remain very still, consume little food and stand a long winter's confinement without inconvenience. This may be secured by chaff-packing the hives out of doors, or setting them in a double walled house, the space between the walls being filled with cut straw, chaff, sawdust or tan bark. In a climate like that of Canada, the space between the double walls should be at least 20 inches. Our winter bee houses failed at first because the walls were too thin. They did very well in mild winter weather, but when a hard cold spell came, the frost crept through and stayed inside, to the destruction of the bees. Some have had good success by wintering their bees in a dry cellar, but it is not so easy to secure perfect seclusion of light and the desirable quiet in a cellar, as in a house built for the purpose.

For the American Bee Journal.

Dovetailed vs. One-Piece Sections.

JAMES HEDDON.

From the tone of Mr. Riegel's communication in the BEE JOURNAL of Feb. 16th, I must think him honest in his opinions about sections. I know, for my own part, that no interest I ever had in any article prejudiced me an iota for or against it. Of course, I give Mr. Riegel the same credit I ask for myself, more especially after reading his gentlemanly and enthusiastic article. It has always been my idea that behind enthusiasm lies honesty, if nothing more.

Allowing that we are strong believers in the claims we advocate, the next point to settle is the question of who is right. Mr. Riegel's method is surely a novel one, and I do not see what is to hinder our making the "premium" \$1,000, so long as we risk nothing, and provided the National Convention do not object. I see no reason why they should, unless it depends upon the little matter of the \$1,000. But, really, is it not a *better* test to wait, and see which goes into general use? This will give us the honest decision of thousands of practical bee-keepers, instead of ten "picked" ones. We can remember and wait; can we not?

I do not want your \$10, nor the National Association to have it, without some equivalent. A wager would prove nothing, but to show our earnestness in the matter. I believe nearly or quite every reader of the BEE JOURNAL will give us credit for that virtue, and we can keep our pocket-books out of this controversy.

The spruce sections I had reference to are of my own style. Have you used them, Mr. Riegel? I have used only a few of the Root and Lewis & Parks one-piece sections. Now, I wish to say that I have never seen a one-piece section that, when doubled together, the joints did not shut so loosely as to make a weak, rickety box, or so tightly as to strain the thin shaving that held the parts together, which, after a while, cracked apart; generally, the former objection—or both—at different corners.

In a back number, the editor of the BEE JOURNAL said that nailed sections were preferable, because they were stronger than those dovetailed. There are times when combs of honey need the support of a strong section; a section that will yield $\frac{1}{2}$ of an inch will injure those combs materially at such times. The great majority of one-piece sections have this rickety condition, so far as I have seen them.

Again, is it possible to make machinery so true that you can make a one-piece section, or cut pieces to be nailed, so that when squared up into boxes they will be square? I think not; I have never seen it done. The dovetailed boxes can be pressed square instantly.

I have never seen any dovetail work, except this spruce New England box, in which the dovetailing was *tight* enough to make it as strong as nailed. I am not prejudiced in its favor because I adopted it; I adopted it because I was prejudiced in its favor. It is no blood relation of mine, only a child by adoption, and I can cast it off any hour and take the one-piece section to my bosom, and I will, when I think as Mr. R. does.

A section that is as solid as a nailed one, and has the advantage of thin pieces all around, and the still further advantage that you press it to *any* angle, right, acute or obtuse, and it is solid the same, is the section "I prefer."



About the "naughty" little sharp corners, can you not see them in the above cut? Do you not see how they will snag the caps of the combs next to them? If separators were used they would not; but if no corners are there they will not, where no separators are used. We cut up three boxes of tin into separators, and watched the effects closely for two years, and these separators are better adapted to some supply dealer who can "grind" his ax with them. We use them to patch knot-holes, etc. I suppose if the one-piece section was (as it can be) made without the corners (i. e., so the narrow piece would extend clear through), that the warping of the wide pieces would all the worse break the shaving that holds them together. I think, of the two evils, the least one is chosen by putting on the "naughty corners," as shown in the cut.

I have mailed to Mr. Riegel a sample section such as I use, and trust it and time will convince bee-keepers that I am right. If to the contrary, that I am wrong, then I will say, "I was mistaken; that is all."

Dowagiac, Mich., Feb. 18, 1881.

For the American Bee Journal.

Best Hives for Winter.

HENRY ALLEY.

The present winter will demonstrate whether single-wall or double-wall hives are the best for wintering bees on summer stands. I am inclined to the opinion that double hives are the best. I have both kinds in use, and as my bees are on the summer stands, I am able to say which are doing the best.

I examined a few of each the other day. I found that the inner sides of the single hives were very frosty, though the bees and frames were covered with a chaff cushion 4 inches thick; but the bees were in fair condition. Those in the double-wall hives were free from frost, nice and dry. The double hives are exactly like Root's chaff hive, only no chaff is used between the inner and outer walls. This style hive was made by me 15 years ago. I see no need of filling the space between the hives with chaff. A dead-air space is all that is needed. It would seem like nonsense to build a house with walls 10 feet thick, and leave the doors open during the winter. Now, that is exactly the case with chaff hives. I further noticed about the single hives, that where the snow was piled against them, the moisture condensed there, and considerable more frost was opposite those places where the snow touched the wood than in other parts of the hive. With the double hives that was not the case.

I am inclined to think that double hives are the best to winter in on the

summer stands. The bees in the single hives will fly when it is too cold, while those in the double hives will not. This is owing to the bees having been confined to their hives so long, as they would not attempt to fly from any hive if confined only a month.

It is nearly three months since my bees saw daylight until to-day, when they had a good flight. They are all out of doors. This is the hardest winter in all my experience for bees—it being two winters in one.

I have made a new double-wall hive, on the Langstroth principle, for wintering bees in on the summer stands, which I may describe in a future article.

Wenham, Mass., Feb. 21, 1881.

For the American Bee Journal.

Apiarian Melange in General.

DR. J. P. H. BROWN.

MR. EDITOR:—In most things I am very conservative—never care to give up an old and tried friend for a new one. I was familiar with the old AMERICAN BEE JOURNAL from the days of the polished and gifted Wagner. I looked upon it as an old steadfast friend; and when you proposed to change it into a weekly, I received the announcement with anything but favor. I have now received 5 numbers of the "transformed" JOURNAL, which are sufficient to stamp its character. I must congratulate you on your success. In subject matter, in general get up, in neatness, beauty and clearness of typography, the world cannot beat it.

Comb Foundation again! After reading our friend John Bourgmeier's criticism of my article on comb foundation, I felt, perhaps, that I had unwittingly committed what Bro. Clarke terms an "Irish bull." If I did, I can't see it. I discussed foundation, *not* machines; and I cannot conceive how any one could misapprehend my remarks.

There is no doubt, Mr. Editor, that much newspaper debate could be saved if persons would avoid reading by the rule of *distortion*, abstain from thinking by the rule of *twistification*, and stop speaking by the rule of *inflation*.

Our winter:—The winter has been the coldest for many years. As bees are wintered out, with no protection, I fear all weak colonies will suffer, and probably die before the 1st of March. Box-hive bee-keepers will lose heavily. Those who use the frame hive can save many colonies by liberal feeding.

Augusta, Ga.

For the American Bee Journal.

Size of a Colony of Bees.

E. A. MORGAN.

In the February number of the BEE JOURNAL, E. B. Southwick speaks of my report, and thinks my statement that 3 pecks of bees make a good strong colony, and that my 24 would make that amount, a little large. He thinks that bee-keepers generally consider 1 peck a large colony, 4 quarts a fair colony, and 2 quarts a small one. We might agree, if he had said on the 1st of April; but if he means during the honey yield, I do not agree with him, neither will any bee-keeper who has studied the business and found what it takes to secure a large surplus. This idea of a colony would ruin beginners; they could never winter a colony, and would never get any surplus. Nothing is more correct than that large colonies give the surplus. This is the essence of all profitable bee-keeping. I think all successful bee-keepers will say with me, that 1 peck of bees is a very small colony, and 4 quarts or 2 quarts are nuclei for queen-rearing, and should be united. If surplus is the object, certainly if hived after June 1st they would not be expected to go into the sections, and would not go into them if expected to. I have bred queens for two years from two colonies which proved the most hardy, most prolific, and the best honey-gatherers. I have beheaded many queens because they could not keep up a colony, and have succeeded in getting a race which are profitable. Several of my colonies were worked in 10-frame 2-story Lang-

stroth hives, and filled them with bees from June until frost. Any one of them would measure 3 pecks. They flew in one continuous stream, and a colony such as Mr. Southwick speaks of, could be shaken from 4 frames any time during the season. His frame—12x13 in., 9 in a hive, could hold 28,800 bees, while 50,000 is considered a good colony; thus his large colony is 21,200 bees short of a colony—50,000 dead bees measure 3 pecks. I have under-estimated, for I think some colonies will reach 60,000 bees.

My plan is to keep prolific queens, which will fill the hive and surplus arrangement full of bees, and then with hard work, constant watching and proper manipulation, we can secure a large surplus. My best colony gave me 245 lbs. of comb honey this season, while the parent colony gave 185 lbs.

I do not think my mode of packing expensive. The outer case is 8 feet of "cull" lumber; the entrance is left open, only one thickness of duck is put over the frames, then the upper story is put on and filled with dry chaff. The gases escape at the bottom, the moisture passes up through the packing, and the heat is retained. My bees, put away as described in the article in December BEE JOURNAL, have passed through the most severe winter ever known in Wisconsin this far, and every one is in the best possible condition, not losing a gill of bees apiece. They have flown for the last two days. If nothing unusual happens them hereafter, I intend to improve upon last year, if possible.

Arcadia, Wis., Feb. 10, 1881.

For the American Bee Journal.

Chips from Sweet Home.

D. D. PALMER.

It is doubtful about there being any plant that will pay to cultivate for honey alone, although there are many which will pay to cultivate for fruit and honey. Which one will pay best, will depend upon how the owner is situated.

The raspberry affords considerable honey and blooms with white clover, being of value especially when we have wet weather as the bees will gather honey from it when the rains wash the nectar out of the clover. I have been unable to notice any difference in the amount of nectar yielded by the black, red, or yellow raspberries, there is a difference in the time of blooming, corresponding to the time of ripening the fruit. Of the yellow varieties, I have not yet found any worthy of cultivation.

Of the red, I would cultivate Brandywine for market; it is productive, of uniform size, bright red color and firm, and bears handling well. For home use I would prefer the Turner, as it is a better flavored berry, but too soft to bear handling.

Of the black raspberry there are several varieties, the berries of which differ less in flavor than the red; as to which of them is best to cultivate, would depend upon what we wanted them for. The Davidson's Thornless is free from thorns, and is 2 to 3 days earlier in ripening, but of small fruit, and only a few plants will make good strong bushes. The Doolittle ripens within 2 or 3 days of the above, grows upright and stocky, and an abundant bearer of good sized berries; for an early raspberry it is my choice. Lumb's ever-bearer, bears the usual crop, and then continues to shoot up suckers which bear till frost. It is not a profitable berry, for the usual crop is light, and to have a dish of fresh raspberries after all others are gone, you would need a large planting. The Miami and Seneca are good, if we did not have better to fill their place. The Hoosier is a new variety just being introduced, a good bearer of good sized uniform berries of a glossy black color. The Gregg is also new, but more thoroughly introduced than the Hoosier; a good bearer of berries, of uneven size, running from small to very large. For a late bearer, the Mammoth Cluster has remained the standard for many years, grows upright and stocky, productive, berries large, and make strong plants. The Sweet Home is another new one originated in 1873; the bush grows upright and stocky, very productive, bear-

125 bushels per acre, while from 50 to 75 bushels per acre is considered a good yield for other varieties; the berries are uniformly large, and continue so till the last picking. It is a late bearer, from which 2 or 3 pickings can be had after blackberries. The above are all hardy.

New Boston, Ill.

For the American Bee Journal.
Bee Notes from Mississippi.

OSCAR F. BLEDSOE.

I began the last season with 25 colonies; lost 8 or 10 that "went west;" increased to 76, mostly by natural swarming; have now about 55 colonies. I extracted about 600 lbs. of honey. My error was in allowing them to swarm too much. This season I shall try to repress all swarming, and bring each hive up to the largest capacity, to wit: 2 stories containing 4,000 cubic inches, well filled with bees. I could, with the start I have, easily increase into the hundreds; but as I doubt the pecuniary profit of bee-culture here, I do not desire more than I have at present.

Wintering is easy here. Any hive with a moderate supply of honey, will winter well on its summer stand. It greatly assists wintering, to fill a frame of the lateral dimensions of the top of the hive, 2 inches deep, the bottom covered by coarse cloth, with cotton-seed, and set it on top of the hive under the cover. All the honey gathered up to Aug. 1st is of excellent flavor. There is little sale for bees or honey here.

I have received many inquiries from Northern men as to this section. It is good for cotton, corn, wheat, potatoes, fruit, etc. All the hill portions of Mississippi are healthy. Northern men could do well here. All are welcome who propose to help us till the soil or develop the country. Land is cheap and easily obtained. The best way is to come and look for yourself; make a selection, and send for those left behind.

Grenada, Miss., Jan. 27, 1881.

For the American Bee Journal.

Those Stingless Bees.

L. L. LANGSTROTH.

In his prospectus of the "Stingless Bee Association of America," Mr. Hawley says:—"On the 15th of September last, the undersigned published in an Albany newspaper an article on the subject of 'Stingless bees,' which, so far as I am aware, was the first intimation the bee fraternity of the United States had that there existed anywhere on the habitable globe, a species of the honey bee that had *no stingers*."

For the benefit of Mr. Hawley and others, who through his ignorance on this matter, may be at much expense, which will result only in disappointment, I will give you some facts as to the stingless bees of South America.

The stingless bees belonging to the genus *Melipona*, have been long known both in Europe and in this country. Notices of them will be found in works on bee culture. Before the death of Huber, a colony was presented to him. In 1860, a colony presented to Mr. Judd, of the *American Agriculturist*, was sent to Mr. Parsons' apiary, at Flushing, L. I., and placed under the care of Mr. Cary, of Coleraine, Mass., who that year had charge of Mr. Parsons' apiary. Mr. Cary told me that they all died after the first cold weather. Their honey was stored in waxen pots shaped like the half of an egg, and entirely separated from their brood combs. Retreating, on the approach of cold weather, to their brood combs, they starved to death. Even with honey stored in brood combs, we find it often difficult in very cold weather, to save our bees; how utterly impossible would it be to do it, if the honey stores were outside of the brood combs where the bees must cluster for warmth?

Mr. Newton, when Commissioner of Agriculture, had a colony of stingless bees placed in the botanical garden at Washington. The late Samuel Wagner and myself examined these bees, or rather saw them flying in and out of the

hollow log in which they were brought from South America. This colony also died as soon as the weather became cold.

I believe that Mr. Hawley would be as successful in raising oranges and bananas in the open air where the mercury sinks below zero, as in rearing these bees anywhere in the U. S., Southern Florida perhaps, excepted.

One word more:—"These bees," I quote from Mr. Hawley's circular, "are indigenous to Brazil, south of the equator, inhabiting a climate similar to that of Italy, and with surroundings very like those of that country." Does Mr. Hawley suppose that in Italy, no part of which is exempt from occasional frosts and snows, the climate is similar to that of Brazil?

If Mr. Hawley will refer to the back volumes of the BEE JOURNAL, he will find that before the Italian bees were carried to Brazil, the honey interest there was of small account. The German who carried that bee there, and who, by disseminating it among the natives, after showing what could be done with it, seems to have had no fear or reverence for any or all of the 18 varieties of Brazilian bees described by Mr. Hawley. And yet he does not seem to have carried coals to Newcastle.

I will close by referring to an extract from vol. 5, of the BEE JOURNAL, p. 179, "Bees in Yucatan," which was printed on page 5, of the JOURNAL for this year.

Oxford, O., Feb. 21, 1881.

For the American Bee Journal.

Perforated Zinc to Confine Queens.

CHAS. DADANT.

At the National Convention in Cincinnati, Mr. Jones announced that he had made an *important discovery*. This discovery consists in a sheet of perforated zinc, to prevent the queen from laying in the upper story, or in part of the combs, as well as to hinder the bees from swarming, by preventing queens from going out of the hives.

This device was described by its first inventor, Mr. Collin, 16 years ago, in a French book entitled, *Guide du Propriétaire d'Abéilles*, 1865. I find it also in the French bee journal, *L'Apiculteur*, for March, 1866, with engravings. Perforated zinc sheets are advertised in two French bee journals, and by G. Neighbour & Sons, in every number of the *British Bee Journal*.

Although knowing this device for 16 years, I have not presented it to the American bee-keepers, because I consider it as a poor way of preventing queens from laying in the combs destined for the table; for there is more loss of time, for the bees, to cross the perforated zinc, than profit in preventing the queens from soiling a few cells with brood.

As to the prevention of bees from swarming, the final result, obtained by the use of this implement, would be the killing of the queen by her own bees.

Several years ago the lamented Mr. Quinby had invented a queen-yard, to prevent swarming. The queen, who had her wings clipped, was hindered from following the swarm by bands of tin, which were nailed all around the yard, and the bees were compelled to return to the hive.

I tried this device on 14 of my colonies. In 3 hives I saw the queens attempting in vain to follow the swarms, while some angry bees pinched them, as they do the drones when they want to get rid of them. The colony which had tried swarming first, killed its queen at the third attempt at swarming.

As I saw both of the others continue their attempts, with the same violence towards their queens, which they would have killed also, I hastened to satisfy them, by making swarms; then took out all the other bee-yards, never to use them again.

Of course, the same results would follow the use of these perforated sheets, I therefore advise all the bee papers to copy the above article for the benefit of their subscribers; for the opinion of a man so well known as Mr. Jones, would lead a great many of them to try this obnoxious device, and reap loss and disappointment.

Hamilton, Feb. 7, 1881.



THOMAS C. NEWMAN,
EDITOR AND PROPRIETOR.

CHICAGO, ILL., MAR. 2, 1881.

Do Bees Puncture Fruit?

EDITOR JOURNAL: The following complimentary notice of the Weekly BEE JOURNAL is condensed from the Lancaster Farmer:

"The BEE JOURNAL enjoys the enviable reputation of having been the first periodical exclusively devoted to apiculture in America, and it is, at this time, the only weekly paper devoted to that specialty IN THE WORLD! It is a remarkably clean and clear print, and we commend it to our patrons and the public. Each number contains eight pages, well filled with the most ably conducted bee literature in this or any other country. The Weekly will be acceptable to the old patrons of the BEE JOURNAL (and their names ought to be "legion") not only in America, but wherever the English language can be read, or bee culture pursued. And here we would respectfully suggest that so able a specialist as the editor of this JOURNAL should solve the problem, if possible, whether bees do really tear open and destroy the pulp of grapes or not. That charge rests upon them hereabouts, whether true or false, and we would like to have the sentiments of those who are able to speak with authority upon this much mooted subject."

The reader will observe the invitation of its editor, for a free discussion, "Whether bees injure or destroy sound grapes?" and as the impression prevails in some localities that they do, it is hoped that the subject will receive through the columns of the JOURNAL the attention it deserves.

Pine Grove, Pa. W. H. STOUT.

The editor would remark that he is unable just now to solve the problem. Many able and experienced apiarists state that they have *tested* the matter, by placing grapes already punctured before the bees, and when they were busily engaged in sipping the juice therefrom, that they had removed the punctured fruit and put sound grapes in their place; and that in no case did the bees puncture the sound fruit.

On the other hand, many grape-growers assert, as positively, that they do puncture the sound fruit. In some cases, however, they have since admitted that upon closer examination they found the grapes had been previously wounded by wasps or other insects.

The question, then, must be settled by observation, acute and critical; and we invite those who have witnessed any depredations of this sort to state the matter in the BEE JOURNAL. We do not want theories; but positive witnesses, or physiological reasons why bees cannot commit the offenses charged against them.

We want the facts—whether it be for or against the bees—to ascertain the *truth* is our only object. If bees can and do commit such depredations, then we must protect our neighbors, or remove our bees to places where they cannot annoy them personally nor destroy their fruit, unless the fact be established that they recompense for all damages, by the timely assistance they render in the fructification of all fruit germs. If they do not, we want to be able to convince our horticultural friends that they are wrongfully charging mischief to the bees.

The Law on Food Adulteration.

The following letter on this subject is from Dr. N. P. Allen:

Smith's Grove, Ky.
I am much interested in the articles on adulteration in the BEE JOURNAL. All consumers are interested in having food adulteration prohibited, and bee-keepers should use all their influence to have such a law passed as soon as possible. We need a *general* law, to include every kind of adulteration, attaching a heavy penalty, to be divided between the informant and the government. A special law, such as we have in Kentucky, is valueless—a failure. The English law, as given in the BEE JOURNAL, is to the point as far as it goes, but I would have it embrace all commercial articles, for we suffer by the adulteration of almost every article we purchase.

The enforcement of the law is the difficult portion, hence the necessity of paying the informer liberally for bringing the guilty parties to justice. A sufficient number of chemists should be appointed in every State to analyze articles presented for that purpose, and every thing should be sold under its right name.

N. P. ALLEN.

"Aye," Doctor, "there's the rub;" these chemists are not above reproach—they too, can be bought or bribed, or are either incompetent or too lazy to make a proper analysis. A case in point occurred in this city only last week. A manufacturer purchased a barrel of honey, and upon finding it granulated, he concluded that it was adulterated. (He had hitherto been using that not granulated.) He applied to a chemist, and that functionary decided (without analysis), that it was about one-half glucose. We were then appealed to and informed the manufacturer that the granulation was of itself proof of purity.

By such indolence, and may we add, ignorance, will not the average chemist often decide contrary to the facts in the case, and thus make the law of no avail? Another case in point occurred in this city during the past month—where an official, by a series of excuses, put off the informant, (for we have a city law against the butter fraud), intending apparently to wear him out, and defeat the enforcement of the law.

It will require the closest scrutiny and the most practical knowledge, to make a law that will be successful in driving to the wall, the unscrupulous adulterators. We must confess we have but little faith in the law before congress, and if passed, we fear that it will prove more of a snare than a blessing.

New Publications and Price Lists.

"EXTRACTED HONEY; Harvesting, Handling and Marketing." This is the title of a 24 page pamphlet, by C. & C. P. Dadant, Hamilton, Ill., price 15 cts. This gives in detail the methods and management adopted in their apiary. It contains many good and useful hints and is well worth the price.

PRACTICAL HINTS TO BEE-KEEPERS, by Chas. F. Muth, Cincinnati, Ohio; 32 pages, 10 cents.—This pamphlet gives Mr. Muth's views on the management of bees, and embraces several of his essays given at Conventions, &c. It will be read with interest by beginners as well as those more advanced in the science of bee-culture.

THE KANSAS BEE-KEEPER is to be issued monthly by Scovell & Anderson, Columbus, Kan. It contains 4 pages, about two being reading matter, and is evidently intended to wake up an inter-

est in bee-culture in that state and sell their supplies. It will no doubt accomplish its mission.

The following Circulars and Price Lists are on our desk.

S. G. Given, Hoopston, Ill.—18 pages, descriptive of his comb foundation press and wired frames.

Riegel & Drum, Adelphi, O.—An 8 page price list of bee-keepers' supplies.

Paul L. Viallon, Bayon Goula, La.—16 page price list of implements for the apairy.

J. E. Moore, Byron, N. Y.—4 pages, descriptive of his Perfection Honey Box, &c.

W. J. Davis, Youngsville, Pa.—3 page price list of Italian Queens and Bees.

Hiram Hoop, Carson City, Mich.—1 page—Italian Bees, Hives, &c.

J. P. Moore, Morgan, Ky.—1 page—Italian Queens and Bees.

Williamson & Bro., Lexington, Ky.—32 pages—Lumber and Bee-keepers' Supplies.

M. Richardson, Port Colborne, Ontario Canada.—8 pages—General Supplies for the Apairy.

J. A. Osborn, Rantoul, Ill.—4 pages—Implements for the Apairy.

A. E. Manum, Bristol, Vt.—32 pages—General Bee-keepers' Supplies.

Frances Dunham, Depere, Wis.—16 pages—Comb Foundation, Machines, and Apiarian Supplies.

Alfred H. Newman, Chicago, Ill.—32 pages—Bees, Implements for the Apairy, Books, &c.

G. M. Doolittle, Borodino, N. Y.—12 pages—Bee-keepers' Club List, Queens, &c.

S. E. Stauffer, Adamstown, Pa.—1 page—Poultry and Bees.

J. D. Enas, Napa, Cal.—1 page—Italian bees, queens, hives, &c.

James Heddon, Dowagiac, Mich.—20 pages, descriptive of his hive, and giving prices of supplies generally.

F. L. Doughtery, Indianapolis, Ind.—12 pages—Bee-keepers' supplies, bees, queens, &c.

Edward B. Beebee, Oneida, N. Y.—12 pages—Cyprian, Syrian, and Italian Bees, &c.

D. A. Pike, Smithsburg, Md.—4 pages—Albino and Italian bees and queens.

C. H. Lake, Baltimore, Md.—28 pages—Apiarian Supplies and Club List for bee papers.

J. F. Hart, Union Point, Ga.—8 pages—Hives, Frames, and Bee-keepers' supplies.

F. W. Holmes, Coopersville, Mich.—4 pages—Comb Foundation, Extractors, Smokers, &c.

Dr. J. P. H. Brown, Augusta, Ga.—26 pages—Italian and Cyprian Bees, and Apiarian Supplies generally.

This issue of the BEE JOURNAL, the first in the month, goes to all the subscribers of the Weekly, Monthly and Semi-Monthly. Should any of the latter wish to change to the Weekly, they can do so at any time, by paying the difference.

Right glad are we to welcome the Rev. L. L. Langstroth to our corps of correspondents. Having in some measure been restored to health, he immediately grasps his pen, and the article entitled "Stingless Bees," on page 67 of this JOURNAL, is the result. Nearly two years have elapsed since he last wrote, but he knows nothing of the intervening time—hence the repetition of some things found in our remarks in Nos. 1 and 2 of the Weekly BEE JOURNAL. With his active brain and ready intellect, he will very soon grasp the whole, and catch up.

Can I put in my advertisement once each month and reach all the readers of the BEE JOURNAL?" This is a question that is asked by several. Of course you can. The first issue in every month goes to every subscriber—monthly, semi-monthly and weekly. But as 19 out of every 20 of all our subscribers take the weekly, it is a matter of small moment which week an advertisement is inserted. Those who are too poor to take a weekly, or those who are not enough interested in the art to get and read it, will not benefit an advertiser very much. Advertisements may be inserted every other week, or once a month, or weekly, as desired.

We can supply but a few more of the back numbers to new subscribers. If any want them, they must be sent for soon.

Instead of sending silver money in letters, procure 1, 2 or 3 cent stamps. We can use them, and it is safer to send such than silver.



Food Adulteration.—The *Rural New Yorker*, remarks as follows upon the subject:

The adulteration of food, condiments and beverages, has become an immense business from which some people derive very respectable profits.

Many people would not seriously object to eating oleomargarine, knowing it to be such, but they do object to eating it for butter. When sold as oleomargarine it is well enough, for when properly manufactured it is much more wholesome and nutritious than poor butter.

Pulverized sugar has many properties that would not make it "half so sweet" if we knew what they were. The presence of certain acids is necessary in order to correct the dull, yellow color of the cane sugar, and glucose is now largely used in sugar manufacture; so largely, indeed, in one instance that it is said a single firm in one year realized as profits \$1,000,000 on a capital of \$400,000. Glucose syrup mixed with low grade molasses makes an excellent golden syrup, which sells well in market, or when allowed to harden it can be ground up and mixed with low-grade dark-brown sugar, and a substance results having the appearance of a refined, light-brown sugar, though not quite as sweet.

And so we might go on through the list, finding in confectionery almost every metallic poison known to science; in coffee, various quantities of chicory and other substances; in certain teas, 35 per cent. of poisonous substances; in pickles, blue vitriol and alum; in pepper, mustard husks, etc., to the extent in an extreme case, of 98 pounds to 2 pounds of pure pepper, and in vinegar corrosive sublimate was found. It is gratifying to know that, in some sections of the country, not only individuals but corporations are becoming thoroughly awakened to this kind of fraud and imposition, and are waging an unrelenting warfare against it, and we trust that at no distant day such preventive means will be used as that no article shall be sold, in quantities large or small, under any other name than its proper one.

Local Convention Directory.

Time and Place of Meeting.	
March 12—Mills Co., Iowa, at Glenwood, Iowa.	
April 2—S. W. Iowa, at Corning, Iowa.	
5—Central Kentucky, at Winchester, Ky.	
Wm. Williamson, Sec., Lexington, Ky.	
7—Union Association, at Eminence, Ky.	
E. Drane, Sec. pro tem., Eminence, Ky.	
1—N. W. Ohio, at Delta, Ohio.	
13—N. W. Ohio, at St. Joseph, Mo.	
D. G. Parker, Sec., St. Joseph, Mo.	
May 4—Tuscarawas and Muskingum Valley, at Cambridge, Guernsey Co., O.	
J. A. Bucklew, Sec., Clarkes, O.	
5—Central Michigan, at Lansing, Mich.	
10—Cortland Union, at Cortland, N. Y.	
C. M. Bean, Sec., McGrawville, N. Y.	
11—S. W. Wisconsin, at Burlington, Wis.	
N. E. French, Sec., Latteville, Wis.	
Sept.—National, at Lexington, Ky.	
Kentucky State, at Louisville, Ky.	
Oct. 18—Ky. State, in Exposition B'dg, Louisville, Ky.	
W. Williamson, Sec., Lexington, Ky.	

In order to have this Table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

The next meeting of the N. W. Illinois and S. W. Wisconsin Bee-Keepers' Association, will be held at H. W. Lee's, 2 miles n.w. of Pecatonica, Winnebago county, Ills., on the 17th of May, 1881.

J. STEWART, Sec.

On account of unfavorable weather the convention at Monroe Centre, Ill., met on Feb. 8, and there being but few present, adjourned to the same place on March 29, 1881.

A. RICE, Pres.

PREMIUMS.—For a club of 2, *weekly*, we will give a copy of "Bee-Culture"; for a club of 5, *weekly*, we will give a copy of "Cook's Manual," bound in cloth; for a club of 6, we give a copy of the JOURNAL for a year *free*. Do not forget that it will pay to devote a few hours to the BEE JOURNAL.



Foul Brood, etc.—When the first No. of the Weekly was received I was pretty nearly disgusted with it, for I had taken it so long in the old form that I did not like its shape "one bit," but have become accustomed to it now, and look rather anxiously for its weekly appearance. I at first wondered what a weekly BEE JOURNAL would do for bee literature of a high character, but I wonder no longer, and I believe it is constantly improving. I am sure I am not the only one that is glad that the "unpleasantness" with the N. E. Convention has been arranged to the satisfaction of all concerned, and hope that you will, in the future, so "mutilate" all personal articles that their sharp edges won't hurt any one. Am glad to see that the bee-keepers are waking up to the importance of that terrible disease, foul brood. Judging from what I know, this region is badly affected by it, and hope by another winter that the bee-keepers in this state will be prepared to see that a bill is passed by our legislature for its suppression. I expect to have the pleasure of showing friend Muth around to see the foul brood in this region as soon as the weather is warm enough, and then perhaps you will hear more about it from him. My own bees are, as yet, free from it, and wintering with very little loss. Success to the BEE JOURNAL.

A. B. MASON.
Toledo, O., Feb. 21, 1881.

An Excellent Crop.—I started with 50 colonies of black bees last spring; increased them to 110, and obtained 125 lbs. of wax and 11,400 lbs. of honey; 10,000 of it being extracted; the balance of it is comb honey cut from Langstroth frames, and put into cans. The honey in this county is nearly all sold, average price 10 1-3 cents per lb.

P. LOUCKS.

Fresno, Cal., Feb. 14, 1881.

[Mr. Loucks certainly has made an excellent report. Over 200 lbs. of honey to each colony in the spring, and more than doubled in numbers is good enough to satisfy almost any one. We would like to hear further particulars of Mr. L.'s management.—ED.]

Bees Wintering Well.—Bees are wintering very well in this section, even better than usual, although we have had the coldest winter and more of it, than ever experienced in this latitude before. Success to the Weekly AMERICAN BEE JOURNAL. Long may it and its editor live, to give us weekly gleanings from the various parts of the globe.

J. S. TADLOCK.
Kingsbury, Texas, Feb. 3, 1881.

Hope Departing.—'Tis said that misery loves company; we are not philosopher enough to let ourselves down from high hope to low despair without a great deal of jolting. Our bees have been confined 102 days. During the fore part of last week, hope ran high. True, it snowed, rained, sleeted and about every thing it could, still the snow was gradually going, and we were becoming cheerful. Friday the wind set in briskly from the east, and by evening a genuine blizzard was upon us from the n. e. and shifting to the n. w. we got the grandest snow storm for 23 hours we have had for years. The cars are completely blockaded, no trains since the 11th inst. Bees are from 2 to 6 feet under the snow, and hourly growing more uneasy. We have made it a point to keep them shoveled out; but I shall now have to abandon that; for there is no longer anywhere to put the snow. My bees are all strong, but a majority of them have soiled the entrance more or less, and will perish in consequence of the entrance becoming clogged and the combs breaking down, thereby drowning the bees. The best success I ever had in wintering was last year, and in spite of the poor summer they averaged 56 lbs. each, and 46 per cent. in-

crease. If Vennor takes away our snow this month, according to contract, I will give him leave to draw upon me for 1 bbl. white clover honey next fall.

J. N. MCCOLM.

Plymouth, Wis., Feb. 14, 1881.

Ventilation.—I am wintering 90 colonies in the cellar and 7 out of doors; all are living, but some in the cellar are getting uneasy. I gave them a small hard snow ball on the top to leak in for water. Mr. Thomas gave the idea in the JOURNAL that it was a good plan in long confinement, but I can tell better after a trial. Mrs. Dawson has lost all her bees; they had no ventilation at the top; the frost accumulated so that water ran on the combs, and the bees drank the water instead of the honey, and when broken open they found ice in the honey-sacs instead of honey, and says that was the cause of death, and you know what a woman can't find out it is no use for man to look after.

L. POINDEXTER.

Kenny, Ills., Feb. 21, 1881.

Bees and Bloom.—MR. EDITOR: You misunderstood the first sentence in my letter, published on page 52. I had reference to articles written for, and published in the JOURNAL. I have always found the AMERICAN BEE JOURNAL ready to encourage everything that tends to the advancement of apiculture in America, and I think, Mr. Editor, you deserve the thanks of all apiarists for your untiring efforts in their behalf. I was much interested in your remarks about growing the flowers to the requirements of the bees. I will give my views in regard to this matter in a future number of the JOURNAL, if desired.

Coleraine, Mass. E. A. THOMAS.

[We shall be pleased to have you do so at an early day, to enable spring experiments.—ED.]

Bees Doing Well.—The past season was very poor for honey here, still we had about as many colonies as usual. Bees that have been properly packed on summer stands are doing well, but those that have been left to take care of themselves have nearly all gone the way of all the earth. I am more than pleased with the present appearance of your JOURNAL.

A. H. CLAUS.
Rushford, Ill., Feb. 22, 1881.

Albinos and Losses.—There will be a great loss of bees this winter through this section of country. I have lost 5 colonies; among them was one Albino queen that I thought to breed a little extra from the coming season. From a colony of Italian bees which my brother bought 16 or 17 years ago, we reared queens, some of which produced part Albino workers. It is possible from some of these escaping to the mountains, originated the first Albino bees brought to the notice of the public. One thing I am certain of: from a queen reared and sold by me to Mr. Valentine, originated the finest Albino bees in this state. This queen was bred from a strain of Italians we got from Argo, which, in speaking of, we called the Argos stock, (mentioned by Valentine in the Jan. number of the *Bee-keepers' Magazine*), and mated with drones reared from a queen producing part Albino workers.

J. M. C. TAYLOR.
Lewisburg, Md., Feb. 9, 1881.

Bees Dying.—The BEE JOURNAL is more than I ever expected it would be in weekly form; it is one of the most useful publications on bee culture, I think, either in the U. S. or Europe. Bees continue to die here very fast. The frame hives were prepared in the following manner: in Oct. the honey boards were removed from the tops of the frames, and in their place was put a nice clean piece of woolen felt blanket, just covering the tops of the frames; on this woolen blanket was put 6 inches of clean wheat chaff, after first putting the cap on. On each side of the cap near the top was a $\frac{1}{4}$ inch hole, for a free circulation of air, on the north and west sides was a tight board fence, to protect the hives from the wind. The hives were about 8 inches from the ground, and entrance contracted so that but 2 or

3 bees could get out at a time. Now after all this fixing, they die very fast, and worse than anything I ever saw so early.

D. W. FLETCHER.

Lansingville, N. Y., Jan. 25, 1881.

Come at last.—The long-looked-for time has come at last, when my bees could take a good fly. To-day is the first time my bees have had a good fly since Nov. 5. Bees that were left unprotected are nearly all dead. Some have lost all. My way of wintering is to pack with chaff on the summer stands. Some that I did not pack before cold weather set in appeared to suffer as much as those left unprotected; those that were packed early, appear to be wintering nicely. I am very much pleased with the BEE JOURNAL. I could not afford to do without it. I think a person keeping but one colony of bees would be greatly benefitted by reading it.

FRANK MCCOY.

Van Wert, O., Feb. 22, 1881.

Queen Fertilization.—Dr. Love seems to doubt my statement in regard to queens, &c.; as he is favored with a warm climate, he will have an opportunity of testing his proposed plan. Let him test, then report. Not being a medical man, I pass his analysis by. Nineteenths of all the bees in this locality have perished by dysentery. For the first time since Nov. my bees had a flight on the 30th of Jan. I have lost 25 colonies, but there is one consolation, almost every one of them left a rich estate to administer on.

M. B.

Fincastle, Ind., Feb. 1, 1881.

Wintering Well.—My bees are wintering nicely. They are packed in chaff on the summer stands. They had a splendid fly yesterday. I wish the Weekly much success.

T. W. COLBERT.

Smith's Valley, Ind., Feb. 23, 1881.

An English Opinion.—I much admire the energy and enterprise of Americans in aparian matters, and think they have a powerful exponent in the BEE JOURNAL.

F. R. JACKSON.

London, England, Feb. 12, 1881.

Foul Brood Cure.—By using bromo chloralum, J. M. Blanchard, of Delphos, Kan., effected a complete cure of Foul Brood in its worst form. The mixture as used by him, was 1 part bromo chloralum, 10 parts water; applied in the usual way.

M. BLANCHARD.

Sherwood, Wis., Feb. 14, 1881.

Bees all Right.—Those bees that were in good condition in the fall, and placed in comfortable winter quarters, are now all right. My wife had 11 colonies last spring, increased to 18; Italianized most of them and obtained 500 lbs. of comb honey in sections, but I am bereaved—my wife is no more. She was weakly, and in search of health studied bee culture, and by the aid of the BEE JOURNAL, she was very successful. Now I am in charge of the bees, and though sad over the loss of my wife, I shall try to be as successful as she was.

F. J. STICH.

Macon, Ill., Feb. 3, 1881.

Notes from Otley, Iowa.—I must express my pleasure at the change of the AMERICAN BEE JOURNAL to a weekly. It is excellent. I await its coming as of an old friend. It is just what we who are engaged in bee culture have long felt the need of. Mr. Young, of Monroe, Iowa, in a letter says: "I still receive the JOURNAL in the form of a weekly, and admire the change very much." We are having a very cold winter. I should think that the ground had been covered with snow for 8 or 9 weeks, with good prospects for its continuing so for some time yet. I think the several methods of wintering bees will be put to the test this winter. My bees are stored away in the cellar where they are warm and dry. I think that I should not deserve to succeed in the business did I have them on their summer stands nearly or wholly unprotected as some have. The other day I presented a friend (who has a few colonies of bees in the above condition), with a copy of the JOURNAL to read; he said

that he did not care to read it, as he was busy, his bees were dying, and he was becoming disgusted with the business. I did not think this strange. I think I should be about like him, under similar circumstances. Had he been a reader of your valuable JOURNAL, and practiced its teachings, I think no doubt he would have saved several times its cost during the present winter. Success to the JOURNAL.

W. C. NUTT.

Otley, Iowa, Feb. 5, 1881.

Bees all Dead.—There is not a live bee in all this county. Out of thousands of colonies I have heard from, not one is alive. Regardless of packing, putting away in cellar, or any other plan of keeping, nearly all die, with plenty of honey in reach, and in my case they had bee candy. The long confinement and cold weather, with not a first rate quality of honey to winter on, has been the trouble.

J. F. CARVER.

Greencastle, Ind., Feb. 12, 1881.

Errata.—On page 573 of the Dec. No. of the BEE JOURNAL, in the communication by L. H. Pammel, Jr., the 11th and 12th line from the bottom of the 2d column, reads "Hoarhound (*Salvia officinalis*), one of the mint family." *Salvia officinalis* is the scientific name of the common sage. That of Hoarhound is *Marrubium vulgare*. On page 580, in my report of Nov. 6, in the three last lines, it reads: "all are covered with pieces of rag carpet over the Novice cushion, with cover removed." Cushion should read bee-mat; the mats are made of thin pieces of wood woven together with twine. There would be no sense in putting carpeting over Novice's cushion. Success to the Weekly BEE JOURNAL.

J. CHAPMAN.

Home, Mich.

Shade for Bees.—I have 18 colonies left, out of 31 that were packed on the summer stands; those that are left seem to be in good condition. Nineteenths of the bees in this locality are now dead. I know several who have lost all they had; some kept as many as 35 colonies; neglect, bad honey and cold weather being the cause. Had the poor honey been extracted, and the bees allowed nothing but sealed honey, and been packed in chaff on their summer stands, losses would not have been half as heavy. I gave sun-flowers a fair trial last spring. For shading I planted two plants to each hive; south and west (hives facing east.) As the season advanced, the plants grew very fast, and when the heated term came, I had a grand shade, decked with beautiful bloom. I think the Weekly BEE JOURNAL one of the grandest productions of the age.

J. H. THORNBURG.

Winchester, Ind.

Honey and Beeswax Market.

BUYERS' QUOTATIONS.

CHICAGO.

HONEY.—The market is plentifully supplied with honey, and sales are slow at weak, easy prices. Quoted at 18@20c. for strictly choice white comb in 1 and 2 lb. boxes; at 14@16c. for fair to good in large packages, and at 10@12c. for common dark-colored and broken lots.—*Chicago Times*.

BEESWAX.—Choice yellow, 30@34c; dark, 15@17.

NEW YORK.

HONEY.—Best white comb honey, small neat packages, 17@18c; fair, do 15@16c.; dark do. 12@13; for beeswax, 12c. for about 3c. under above. White extracted, 9@10c.; dark, 7@8c.; southern strained, 5@6c.

BEESWAX.—Prime quality, 30@32c.

CINCINNATI.

HONEY.—The market for extracted clover honey is very good, and in demand at lie. for the best, and 8@9c. for beeswax and dark honey. Comb honey is in small sale at 16c. for the best.

BEESWAX.—18@21c.

SAN FRANCISCO.

HONEY.—We quote comb 13@14c. Extracted, choice white, 6@7c.; off-colors, 6@7c.

BEESWAX.—22@23c., as to color.

STEARNS & SMITH. 428 Front Street.

“What is the meaning of 'Dec. 81' after my name on the direction-label of my paper?” This question has been asked by several, and to save answering each one, let us here say: It means that you have paid for the full year, or until “Dec. 31, 1881.” “June 81” means that the first half of the year is paid for, up to “July 1st.” Any other month, the same.

North-Eastern Convention.

THIRD DAY.

Convened at 9 a.m., Vice Pres. Doolittle in the chair. After the reading of the minutes, a discussion ensued on Mr. Detwiler's essay, read the first day, and the discussion following it, and it was unanimously agreed that as the controversy was not within the bounds of this Association, (New York and the Eastern States), that the whole matter be omitted from the minutes entirely, and not to be allowed to be again brought before the Association.

CYPRIAN BEES.

J. H. Nellis read a paper by Julius Hoffmann, of Fort Plain, on "The different races of bees and their crosses." He believed a cross between the Italian and Cyprian bees to be the best. In cross breeding we should consider the drones as of as much importance as the queens, and it will be found that drones are even better for transmitting certain qualities than queens. Mr. Nellis said he had black, Italian and Cyprian bees. The Cyprian is anything but a desirable bee. It is very cross and has no special merit for honey gathering.

Mr. Root said Mr. Hoffman understood his business, and has made as good reports for years past as almost any other bee-keeper. Cyprian bees are desirable for their continuous breeding, which is almost miraculous. They continue breeding till late in the fall. Italians leave less air between the honey and the cappings of the cells. People who live in buckwheat sections will find black bees superior to Italians for gathering dark honey.

Mr. House said Italian bees would gather honey from buckwheat when they could get no other, and could get more than black bees.

Mr. Rians said he had between 50 and 60 queens crossed between Italians and Cyprians. They were very prolific and gathered honey late in the fall.

Mr. Betsinger favored the Cyprian bees because they were prolific. It is harder to produce bees than it is to reduce the number after they have been produced. That the Cyprians sting more, is in their favor, as they keep away other bees.

Mr. Scofield had found the Cyprians to breed very late in the fall.

Mr. Beebe said he could not see much difference between Italians and Cyprians as to their crossness. Cyprians breed very late in the fall.

Mr. Root said Italians were less liable to sting than natives, if properly handled. He hoped the same would prove true of the Cyprians.

Pres. Doolittle said Italians did not breed late enough in the fall. He thought the breed could be improved in this respect by crossing with the Cyprians.

PURE HONEY.

The Secretary read a letter from Capt. J. E. Hetherington, of Cherry Valley, who wrote:

Our industry in the future will have to be made prominent, and we must sell the stuff extracted honey and that the sale will be made in small packages, and mostly in winter in a candied condition. If so, some means will have to be taken to overcome the prejudice against it in the interest of dealers who mix glucose with it. I am informed that consumers, particularly in the Eastern States, have been constantly told that proof that the mixture they sell is pure, lies in the fact that does not get hard when heated. I have never heard of this. I have often thought that some little statement covering the fact that pure honey does become candied, printed on our labels, would help the sale of candied honey, and if this could come by authority of your body, it would have more weight. The following would answer the purpose, and bee-keepers could not be met, as far as I like.

Whereas, Vendors of adulterated articles of honey generally mix with glucose, have constantly impressed consumers with the idea that hard or candied honey is impure by reason of this quality, we the members of the North-Eastern Bee-Keepers Association, in convention assembled, do assure all consumers that pure honey exposed to cold, will, in a few weeks become candied, and that we consider this feature certain proof of its purity.

Mr. Nellis thought the association would act wisely in adopting a standard of purity. He favored the adoption of the resolution.

Mr. House said pure honey exposed to cold for four or five weeks, would become granulated or candied.

Mr. Betsinger said the reason for granulation was not cold but moisture. The moisture was caused by the cold.

Mr. Bacon said it was time that every housewife knew that it was the pure honey which granulated in cold weather, and adulterated honey which did not granulate. Granulated honey could be restored to its original state by heating. Mr. Root offered the following on the purity of honey, which was adopted:

Whereas, The production and sale of honey in liquid form, thrown from the comb by centrifugal force, called extracting, free from all impurities, is of great interest both to bee-keepers, dealers and consumers, therefore be it

Resolved, That we fix a standard of purity that all liquid honey will granulate, candy or become hard at the approach of cold weather, and that this quality is a sure indication of its purity, and we desire to inform the public that all that is necessary to restore this honey to liquid condition as when gathered from the flowers is to subject it to gentle heat, by placing the vessel containing the honey in warm water, not heating it above 120° Fahrenheit.

Secretary G. W. House read an essay on the subject: "How can we make the apiary the most profitable?"

Mr. Reed thought more attention should be paid to raising honey producing plants and preserving basswood.

A belated paper on wintering bees, by H. H. Flick was read by Mr. Nellis.

L. C. Root was appointed on the committee on prize essays, to fill the vacancy caused by Mr. Bacon going home.

Mr. Root said it was surprising to him that intelligent bee-keepers should object to the trouble of carrying bees in and out of doors in winter. The trouble was of little importance compared with the saving.

Mr. Nellis offered a form of petition to be forwarded to the different members of the legislature asking for the passage of the law to prevent adulteration of honey and cane sweets, which after discussion, was adopted.

We the undersigned, residents of the — assembly district of the state of New York, being informed that a bill is now before the legislature for the prevention of the adulteration of sugar, syrups, molasses, honey, and similar sweets, now, therefore, we, the undersigned, heartily approve of such a measure, and respectfully urge the passage of any law that will tend to restrict such adulteration and punishment of the adulterators. Such adulterations destroy the tone of legitimate production and ruin the health of consumers; therefore, we as producers and consumers of sweets pray that you give the subject earnest attention and enact such laws as shall compel the adulterators of wholesome sweets with corn sugar and glucose to label the same articles with their true names, and not to deceive the consuming public by selling the poisonous adulterations under the guise of the genuine articles.

AFTERNOON SESSION.

The report of the committee on question drawer was first taken up. In reply to one of the questions, Mr. Root moved that this convention considers light detrimental to successful wintering; adopted. The questions and answers are given below.

In this climate do we have weather cold enough to freeze bees, provided they have honey in the hive to which they have access? No.

Is the side box system a success? Yes, by two; no, by one.

Is a fixed foundation a success when used for a brood chamber? No, by two.

Is it advisable to use full sized sheets in brood chamber? Yes.

Which is preferable, a hive without bottom, or bottom fastened to hive? Bottom fastened to hive.

Is comb foundation 6 months or a year old accepted by the bees as readily as that just made? No.

What amount of surplus room for box honey is it advisable to give a colony at one time? What the colors required?

What is the best method of getting bees started in surplus boxes? Fill the boxes with comb.

Would you recommend full sheets of foundation for surplus boxes? One for "full sheets;" two for "starters."

Which is the best, natural starters or foundation?

What is the best foundation for side cases? "Our own," by two; no side boxes wanted.

Will it pay to construct an inner box just large enough to hold combs to winter 6 Langstroth or 5 Quinby frames, that will set into the main hive, the object being to carry just what is needed to the cells instead of the main hive? They can also be used for nucleus hives in summer. No.

What is the best extractor for the beginner to use? A. L. Root's is the best.

What time of year is the best to purchase queens when you have all natives and want to change to Italians? Any time you have the money.

Is it objectionable for bees to breed in winter, say February? No breeding necessary till spring.

Are bees more inclined to supersede clipped queen than uncapped? No.

Can bees keep combs made profitable in a locality minus basswood, with plenty of white clover, alseike, golden rod and buckwheat? Yes.

The quality of wax and weight of foundation being equal, which is preferable for use in surplus boxes, flat bottomed or lozenge shaped bottomed foundation? Bottoms as bees build them.

Would it be advisable to take a colony of bees known to be short of honey, in the box, in a room without fire, giving them supplies till they are quiet, and then putting them in their summer stands for the rest of the winter? Be sure all have honey in the fall.

AWARD OF PRIZES.

Mr. Bosworth, from the committee on implements, reported the prizes awarded as follows:

Most practical bee hive awarded to J. H. Nellis. Best smoker awarded the "New Quinby," made by L. C. Root & Bro.

Best honey crate and boxes, awarded to A. E. Manum, Bristol, Vt.

Best crate honey, to S. Snow, Fayetteville, N. Y.

Best package of extracted honey, awarded to L. C. Root & Bro.

Best display of aparian implements, awarded to J. H. Nellis.

Best comb foundation for the surplus boxes, is awarded to the "Vandervoort foundation," exhibited by H. H. Nellis.

Best comb foundation for the brood chamber, awarded to the "Dunham foundation," shown by C. Dadant & Son.

All the other kinds are in close competition, and are a credit to the inventors and manufacturers of the same.

Your committee also find articles on exhibition, and call attention to them.

Bee feeders exhibited by L. C. Root & Bro., A. E. Manum and J. H. Nellis, all worthy of merit, especially the Van Deen feeder.

A machine for fastening comb foundation in surplus boxes, by W. H. Mallory.

Pest's combination queen cage, by J. H. Nellis.

A bee comb foundation, by C. Dadant & Son.

Honey knives and Cheshire knives for supporting foundation while being built out in the brood boxes, exhibited by L. L. Schofield.

W. V. Bosworth, F. H. CYRENUS, O. DINES, Com.

The Secretary offered the following, which was adopted:

Resolved, That the thanks of this association are due and are hereby tendered to the representative of the Utica Morning Herald for the very complete report of our proceedings as published in that paper, and for other courtesies shown us.

The Secretary asked what should be done about prizes for essays next year.

President Doolittle said the medals had brought in essays, but it had shorted the time for debate.

Mr. Nellis thought offering prizes for essays and implements were progressive. The matter was discussed without action, the subject being left with the executive committee.

PRIZE ESSAYS.

Mr. Doolittle, from the committee on prize essay, reported awarding the gold medals and premiums as follows:

Gold medals for best essays: "The different races of bees and their crosses," J. Hoffman, Fort Plain, N. Y.; "How can we make the apiary most profitable," George W. House, Fayetteville, N. Y.; "Wintering Bees," Chas. Dadant, Hamilton, Ills.; "Marketing Honey," C. P. Dadant, Hamilton, Ills.

Cyprian queen offered by L. C. Root for the best essay on any other subject, awarded to W. A. House, Fayetteville, N. Y., for his essay on "Foul Brood."

SEPARATORS.

Mr. Nellis asked, had any one had any experience with perforated separators.

Mr. Snow said a year ago he had used perforated wooden separators, and he found perforated wooden separators were better than tin ones. This season he had replaced his glass and tin separators with wood. In some cases the bees worked a little faster when wood separators were used.

Mr. Rians said some of the bee-keepers of his section claimed that they got whiter honey with wood separators than with tin, the bees clustering on the wood where they would not on tin.

Mr. Scofield said the warmth of wood was preferred by the bees to tin or glass.

Mr. Betsinger said he had used wooden separators some years ago, and his neighbor had tried and abandoned them because he found that bees made many more bars on the wooden separators than on the tin.

Mr. Doolittle said he had used perforated separators, but came to the conclusion that the cost and trouble did not pay; he therefore abandoned them. He used tin separators, not perforated.

Mr. Root said the reason of fastening combs to the side might be due to the weather and atmosphere, and not be due to the fact whether the separator was wood or tin. He had tested wood and tin side by side many times. By using separators of wood the entrances were spread and made larger. The advantage is that the bees will store honey more readily.

Mr. Snow said that in using tin separators he was obliged to put them with in $\frac{1}{4}$ inch of the bottom of the boxes, which was about right. By using wooden separators he got his boxes full of bees sooner.

Mr. Root said he had no doubt you could not, by offering Capt. Hetherington \$500 a year, induce him to use entrances less than $\frac{1}{4}$ of an inch wide.

Mr. Doolittle said his experience was contrary to that of Mr. Root. He did not see the advantage of a larger entrance. To experiment he took the bottoms entirely off, and saw no difference between those with the bottoms entirely off and those with the $\frac{1}{4}$ inch opening he commonly used.

The convention then adjourned.

Barren County, Ky., Convention.

The Bee-keepers of this county met at Walnut Hill, Ky., Feb. 12th, for the purpose of organizing a county bee-keepers' society. H. C. Davis stated the object of the meeting, after which Dr. N. P. Allen was called to the chair, and J. M. Holman made secretary, *pro tem.*

On motion, the chair appointed the following committees: J. T. Gray, I. N. Greer, H. C. Davis and J. M. Holman, to draft constitution and by-laws, which, on motion, were adopted and the committee discharged.

The convention then elected the following officers for the ensuing year: I. N. Greer, President, J. T. Gray, Vice President, and J. M. Holman, Secretary.

On motion, the president appointed the following committee to select questions for discussion: J. T. Gray, H. C. Davis and D. W. Hodge; after which the meeting adjourned.

At 1 p. m. the president called the convention to order. The committee on questions reported a programme, which was adopted.

WINTERING BEES.

J. T. Gray recommends putting bees in the lower story, covering them with a quilt, filling the top story with old clothes or rags, well covering the hive with straw.

H. C. Davis put his bees in the lower story, put a quilt on, with old clothes or rags in top story; set them on a platform, six inches apart, with plank on west side, 8 inches from hive, with grass packed around and under the hive, except the entrance, which faces east; then cover with boards for shelter.

N. P. Allen approved the plans recommended by Gray and Davis, only he did not like the plan of moving bees to a platform, but prefers them to remain on the summer stands, with chaff cushions as absorbents; he said the cushions were convenient, and kept the bees dry and warm, and that it was important to put them down in the lower story early in the fall, give them plenty of stores, and arrange the combs so as to have the ones partially filled, in the centre of the hive for the bees to cluster on.

BEST PLAN OF BUILDING UP IN SPRING.

H. C. Davis built up weak colonies by feeding sugar syrup and wheat or rye flour, unbolted.

I. N. Greer said he united weak colonies, and fed honey.

N. P. Allen said very weak colonies should be united and fed on sugar syrup, honey or candy, as the season advanced; he would build up the weakest by taking brood from the stronger colonies. He spread the brood and put combs in the centre of the brood nest, until the lower story was full of brood; continue feeding until honey was abundant in the flowers, and thus raise a large army of bees to gather the harvest when it came.

Dr. N. P. Allen was made an honorary member.

The following resolution was adopted: Resolved, By the Barren county bee-keepers, in convention assembled, that the thanks of this society be tendered Dr. N. P. Allen, President of the North American Bee-keepers' Society, for his presence and able advice while we were organizing.

Resolved, That the thanks of this Society be tendered the ladies of Walnut Hill and vicinity, for the sumptuous dinner furnished on the ground.

On motion, the president appointed H. C. Davis, J. T. Gray and D. W. Hodge a committee to select subjects for discussion at the next meeting, whereupon the committee reported the following: 1st—Which is the best method of increase,—division of colonies or natural swarming? 2d—Which is the most profitable, extracted or comb honey? 3d—The best method of marketing honey?

On motion, the secretary was instructed to have the proceedings of this meeting published in the *Glasgow Times* and the *AMERICAN BEE JOURNAL*.

Adjourned to meet at this place April 15th, 1881, at 10 o'clock a.m.

I. N. GREER, Pres.

J. M. HOLMAN, Sec'y.



My Annual Catalogue of Vegetable and Flower Seed for 1881, rich in engravings from photographs of the originals, will be sent FREE to all who apply. My old customers need not write for it. I offer one of the largest collections of vegetable seed ever sent out by any Seed House in America, a large portion of which were shown on my six seed farms, and described for publication, on each postcard. All seed guaranteed to be fresh and true to name, so far, that should it prove otherwise, I will refund the order gratis. The original introducer of the Hubbard Squash, Phinney's Melon, Marblehead Cabbages, Mexican Corn, and scores of other vegetables. I invite the patronage of all who are anxious to have their seed directly from the grower, fresh, true, and of the very best strain.

NEW VEGETABLES A SPECIALTY.
12m⁶ JAMES J. H. GREGORY, Marblehead, Mass.

Sections! Sections! OF SNOW-WHITE POPLAR.

They are perfect beauties. Prices again reduced. Samples &c. illustrated circulars free. Address, 1w¹² A. E. MANUM, Bristol, Addison Co., Vt.

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It is to every person's interest, when they wish to purchase anything, to go where they can get the most for their money. State on a postal card just what you want, and we will let you know by return mail what we will furnish it for. No Circulars. Address, 2w¹² HIRAM HOOP, Carson City, Mich.

FRANCES DUNHAM, Inventor and Sole Manufacturer of the

DUNHAM FOUNDATION MACHINE,



AND DUNHAM COMB FOUNDATION,

1w¹² New Circular and Samples free.

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Florida Land--640 Acres.

CHEAP FOR CASH.

DESCRIPTION.—Sec. 4, township 7, south range 7 west, Franklin County, Florida, situated about 50 miles south of the Georgia line, 25 miles west of the city of Tallahassee, the capital of the State, and about 25 miles north of the city of Apalachicola, a seaport on the Gulf of Mexico, and within 2 sections (5 and 6) of the Apalachicola river; the soil is a rich, sandy loam, covered with timber. It was conveyed on Dec. 31st, 1875, by Col. Alexander McDonald, who owned 6 sections, including the above, to J. M. Murphy, for \$3,000, and on Sept. 5th, 1877, by him conveyed to the undersigned, for \$3,000. The title is perfect, and it is duly recorded, as shown by abstract from the Records of the county, duly attested by the County Clerk; the taxes are all paid and the receipts are in my possession.

I will sell the above at a bargain for cash, or trade for a small farm, or other desirable property. An offer for it is respectfully solicited. Address,

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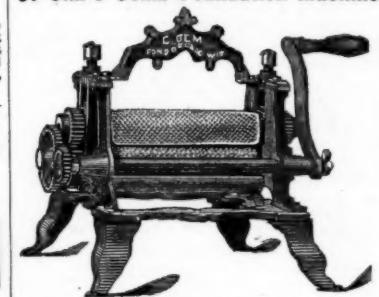
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A NEW PLAN.—For one dollar we will send full printed directions how to prevent the end of the sheet of wax from adhering to the rolls in making comb foundation. Address, Imf¹² SMITH & SMITH, Kenton, Ohio.

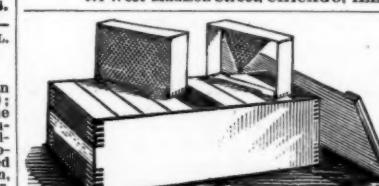
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The best movable-frame Hives; the best Honey Boxes; Lewis' One-Piece Sections, (price \$5.00 per 1000) Dovetailed and Nailed Sections, etc., for the least money. Manufacturing experience of 20 years. Send for Price List. G. B. LEWIS,

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THOMAS G. NEWMAN,
974 West Madison Street, Chicago, Ill.

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J. H. GREGORY'S SEED CATALOGUE. Mr. Gregory's Seed Catalogue (advertised in our columns), opens with several fine engravings of new vegetables, after which follows an immense variety of flower and vegetable seed, including 47 kinds of Beans, 23 of Beet, 54 of Cabbage and Cauliflower, 26 of Corn, 28 of Cucumber, 28 of Lettuce, 41 of Melon, 17 of Squash, 24 of Tomato, 36 of Turnip, &c., &c., all duly described. Catalogues are advertised free to all.

Constitutions and By-Laws for local Associations \$2 per 100. The name of the Association printed in the blanks for 50 cents extra.

We will send sample copies to any who feel disposed to make up clubs for 1881. There are persons keeping bees in every neighborhood who would be benefitted by reading the JOURNAL, and by using a little of the personal influence possessed by almost every one, a club can be gotten up in every neighborhood in America. Farmers have had large crops, high prices, and a good demand for all the products of the farm, therefore can well afford to add the BEE JOURNAL to their list of papers for 1881.

BEFORE PURCHASING ANY
Italian and Cyprian Bees,

Send for our 20th Annual Price List. Full Colonies, Nuclei and Queens at reduced rates, also headquarters for Apianian Supplies in New England.

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Pure Italian Queens, Bees, Colonies
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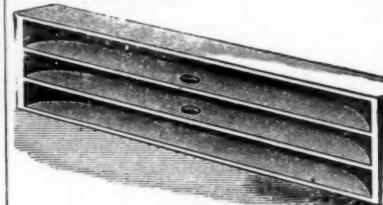
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FEEDERS

Now is the time to make preparations for Spring Feeding.



Shuck's Feeder may be placed at the entrance of the hive, any time of the day, without danger from robbers; feed much or little as may be desired; feed the bees from the inside of the hive. Price, by mail, postpaid, 30 cents. By express, 25 cents each, or \$2.40 per dozen. Special rates on large quantities.



Novice's Simplicity Feeder is made in two sizes, at the following prices: 5c. for the pint and 10c. for the quart feeder, or per dozen, 50c. for the small and \$1.00 for the large, by express. If sent by mail, twice the above prices.

Kretschmer's, by mail..... 35c.

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I will mail my Illustrated Catalogue and Price List FREE, upon application, to any address. All orders for Bee-Keepers' Supplies will be promptly filled.

ALFRED H. NEWMAN,
972 West Madison St., CHICAGO, ILL.

THE ORIGINAL

Patented Jan. 9, 1878, and May, 1879; Re-issued July 9, 1878.



If you buy a Bingham Smoker or a Bingham & Hetherington Honey Knife you are sure of the best and cheapest, and not liable to prosecution for their use and sale. The largest bee-keepers use them exclusively. Twenty thousand smokers have never been returned, or letters of complaint received. Our original patent Smokers and Honey Knives were the only ones on exhibition at the last National Bee-Keepers' Convention, 1880. Care for foul brood, etc., with the wheat from the chaff. Pretensions are short-lived.

The Large and Extra Standard have extra wide shields to prevent burning the fingers and bellows. A real improvement.

Send postal card for testimonials.

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Extra Standard Bingham Smoker..... 2 " 1.25

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15 One-Cent Stamps

Will pay for our exhaustive pamphlet on raising, handling and marketing extracted honey.

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WITH

Imported Cyprian and Italian Queens,

OF OUR OWN IMPORTATION.

GUARANTEED PURE AND GENUINE.

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THE FLORAL MONTHLY

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W. E. MORTON & CO., FLOWISTS,
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Natural Flowers preserved to last for years.

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HEADQUARTERS IN THE SOUTH,

for the Manufacture and Sale of

BEE-KEEPERS' SUPPLIES
SIMPPLICITY
AND
LANGSTROTH HIVES
AND FRAMES.

The New All-in-one-piece Sections!

Having purchased, from A. I. Root, a machine for making these sections, I am ready to supply them in any quantity. Comb Foundation, made of pure yellow wax, and worked on shares; Honey and Wax Extractors, Knives, Bee Smokers, etc.

Italian Queens & Bees!

all bred from imported mothers of my own imports. Dollar Queens, ready April 1st, \$1.10, until June 1st, after \$1.15.

Tested Queens from 1st March to 1st November Safe arrival guaranteed and all queens sent by mail, I send no queens that I would not have for myself. Full colonies of Italian Bees from \$5 to \$8.50, according to quantity, etc. Early 4-frame nucleus, with Tested Queen, \$5. No black bees in the neighborhood. Send for my Illustrated Catalogue of prices, etc. Address,

PAUL L. VIALLON,
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WESTERN BEE-KEEPERS can save money by W sending for our new Illustrated Circular and Price List of Apianian Supplies, Note and Letter Heads, Cards, &c.

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We will make the Dovetailed or the "Boss" One-Piece Section any size up to 5x5, for \$5.00 per 1,000. Material for Langstroth hive, 30c., including brood frames.

JAMES FORNCROOK & CO.
Watertown, Jeff. Co., Wis., March 1, 1880.

TAKEN NOTICE.—There is a patent pending on the "Boss" one-piece Section.

GRAPPE VINES.—A No. 1 by mail, prepaid, splendidly rooted. Prices vary down, Send for Descriptive Price List.

RAFAELLE SHERFY,
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W. E. BEEBE, Proprietor.

ITALIAN QUEENS.

The Large and Extra Standard have extra wide shields to prevent burning the fingers and bellows. A real improvement.

Send postal card for testimonials.

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9mtf Carroll, Carroll Co., Ind.

Safe Arrival Guaranteed!

I am prepared to furnish queens of the purest grade, all bred from Imported Stock:

Untested Queens, in May and June..... \$1.50

Untested Queens, in July and after..... 1.00

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I guarantee all my Queens to be purely mated.

Send for price list—free.

EDWARD B. BEEBE, Proprietor.

Profitable Bee Culture

Sent free to all who send us their names and addresses, plainly written, upon a postal card. Address

H. A. BURCH & CO.,
9mtf South Haven, Mich.

HERSHEY'S STIMULATING
BEE FEEDER.

This feeder can be used on the inside or outside of the hive. Bees need not leave the cluster to get the feed. Feeds water as well as honey. Bees will not get excited when outside when fed with this feeder. Directions for using on 2mtf feeder: 3 by mail, \$1.00. 9mtf J. F. HERSCHEY, Mount Joy, Lanc. Co., Pa.

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FOR SALE, 25 bu. Pure Evergreen Sugar-Corn Seed, at \$2.00 per bu.; 1 lb. sample, by 9mtf J. A. WARD, Madisonville, Ohio.

Italian Queens Only 80 Cents.

Warranted \$1.00. Tested \$1.50. 10 frame Colonies

\$5.50 to \$8.00. Send for Circular, and save money.

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My husband is dead; I will sell 35 Colonies of

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9mtf Mrs. W. STUMP, 18 Scott St., Pendleton, O.

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J. C. & H. P. SAYLES,

Hartford, Wis.

The Sweet Home
RASPBERRY

is the largest, most productive, (bearing 123 bushels per acre,) firmest, best shipping Raspberry ever introduced; perfectly hardy, been tested by 30° below zero; sells the best: costs less to pick, because it is firmer; and uniformly larger than any other Black Cap. For Circular address,

D. D. PALMER, New Boston, Ill.

9mtf

Queens for 1881.

EDWARD B. BEEBE, Proprietor.

ITALIAN,
CYPRIAN,
AND
HOLY LAND
QUEENS!

QUEENS.—We shall breed Queens this season from the best Imported mothers that can be obtained. They are all raised in full, strong colonies, under the most favorable circumstances. We use great care in raising our drones so that all Queens may be fertilized by the best selected drones.

We prepay express charges.

SAFE ARRIVAL GUARANTEED

Send your name on a postal card for our new Illustrated Descriptive Catalogue of Italian, Cyprian and Holy Land Bees. Send now.

Address,

EDWARD B. BEEBE,

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THE
Headquarters in the South

for ITALIAN and CYPRIAN BEES and QUEENS FOUNDATION and APIANIAN SUPPLIES. If you want Early Queens, from stock raised for them most desirable qualities, or want Imported Queen-Danish Foundation in large or small quantities, or Apianian Supplies of any kind, at moderate prices, send for my new Illustrated Price List. Pure Beeswax worked on shares and bought for cash. Address,

9mtf Dr. J. P. H. BROWN, Augusta, Ga.

BEES AND BEE-HOUSES FOR SALE.—

My husband is dead; I will sell 35 Colonies of

Italian Be